## § 160.055-6

less than 9 nor more than 11 stitches to the inch. Bar tacking with nylon thread is acceptable as noted on Dwg. No. 160–055–IA.

- (c) Construction—standard, cloth covered life preserver. This device is constructed from three sections of unicellular plastic foam contained in a cloth envelope and has a neck hole, the body slit in the front, and a fitted and adjustable body strap.
- (1) Buoyant material. The buoyant material of the life preserver shall be three sections of foam cut so as to have finished dimensions in accordance with the patterns shown on Dwg. No. 160.055–IB, Sheet 2, for adult size and Sheet 4, for child size. One or two layers of foam may be used to make up each section.
- (2) Envelope. The envelope shall be cut to the pattern shown on Dwg. No. 160.055-IB, Sheet 1, for adult size, and Sheet 3, for child size, and joined by seams and stitching as shown on the drawing. Alternate finished envelopes are permitted as noted on Dwg. No. 160.055-IB.
- (3) Body strap. The body strap may be cotton or nylon webbing and shall be attached by stitching as shown on the Dwg. No. 160.055–IB, Sheet 1, for adult size and Sheet 3, for child size.
- (4) Stitching. All stitching shall be a short lock stitch conforming to Stitch Type 301 of Federal Standard No. 751, and there shall be not less than 7 nor more than 9 stitches to the inch if cotton thread is used, and not less than 9 nor more than 11 if nylon thread is used. Bar tacking is acceptable as noted on Dwg. No. 160.055-IB.
- (d) Workmanship. Life preservers shall be of first-class workmanship and shall be free from any defects materially affecting their appearance or service-ability.

[CGFR 66–73, 32 FR 5500, Apr. 4, 1967, as amended by CGD 72–163R, 38 FR 8121, Mar. 28, 1973]

## § 160.055-6 Construction—nonstandard, life preservers.

(a) General. The construction methods used for a nonstandard life preserver must be equivalent to the requirements in §160.055-5 for a standard life preserver and also meet the requirements in this section.

- (b) Size. Each nonstandard life preserver must contain the following volume of plastic foam buoyant material, determined by the displacement method:
- (1) 700 cubic inches or more for an adult size;
- (2) 350 cubic inches or more for a child size.
- (c) Arrangement of buoyant materials. The buoyant material in nonstandard life preservers must:
- (1) Be arranged to hold the wearer in an upright or backward position with head and face out of water;
- (2) Have no tendency to turn the wearer face downward in the water; and
- (3) Be arranged so that 68 to 73 percent of the total is located in the front of the life preserver.
- (d) Adjustment, fit, and donning. Each nonstandard life preserver must be capable of being:
  - (1) Worn reversed;
- (2) Adjusted to fit a range of wearers for the type designed; and
- (3) Donned in a time comparable to that of a standard life preserver.

[CGD 72-163R, 38 FR 8121, Mar. 28, 1973]

## §160.055-7 Sampling, tests, and inspections.

- (a) Production tests and inspections must be conducted by the manufacturer of a life preserver and the accepted laboratory inspector in accordance with this section and §160.001–5.
- (b) Buoyancy test. The buoyancy of the pad inserts from the life preserver shall be determined according to §160.001-5(f) of this part with each compartment of the buoyant pad insert covers slit so as not to entrap air. The period of submersion must be at least 48 hours.
- (c) Buoyancy required. The buoyant pad inserts from Model 3 adult life preservers shall provide not less than 25 pounds buoyancy in fresh water, and the pads from Model 5 child life preservers shall provide not less than 16.5 pounds buoyancy.

[CGD 95-028, 62 FR 51215, Sept. 30, 1997]